SONY

3-856-886-11(1)

CD Radio Cassette-Corder

Operating Instructions

CFD-545

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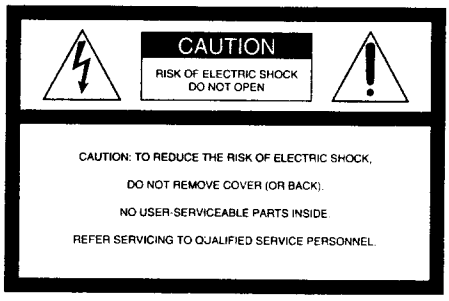
Warning

To prevent fire or shock hazard, do not expose the player to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

The use of optical instruments with this product will increase eye hazard.

For customers in Canada

To prevent electric shock, match wide blade of plug to wide slot, fully insert.

Information

For customers in the United States

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Owner's Record

The model number is located at the rear and the serial number is located in the battery compartment.
Record the serial number in the space provided below. Refer to these numbers whenever you call your Sony dealer regarding this product.

Model No. CFD-545

Serial No. _____

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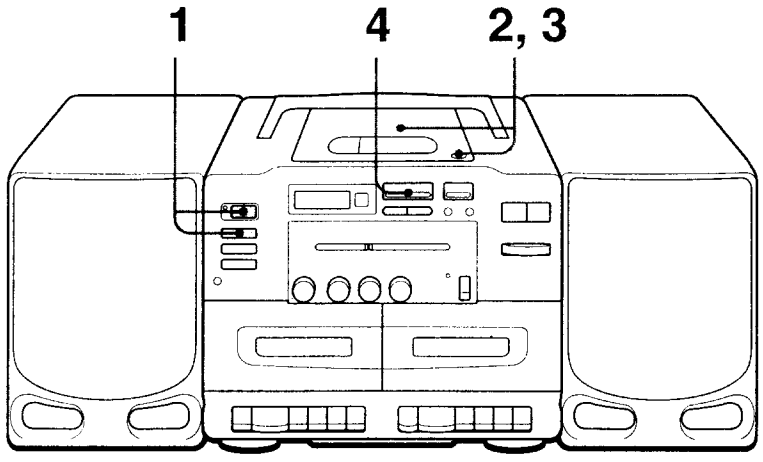
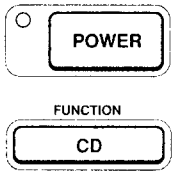
Playing a CD



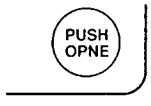
For hookup instructions, see pages 18 – 19.

1

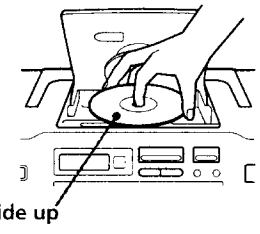


Press POWER and then press CD.

2

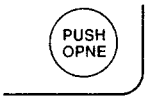


Press PUSH OPEN down to open the CD compartment and place the CD on the CD compartment.

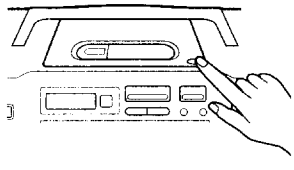


With the label side up

3



Close the lid of the CD compartment.

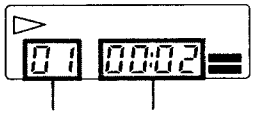


4

Press ▶II .

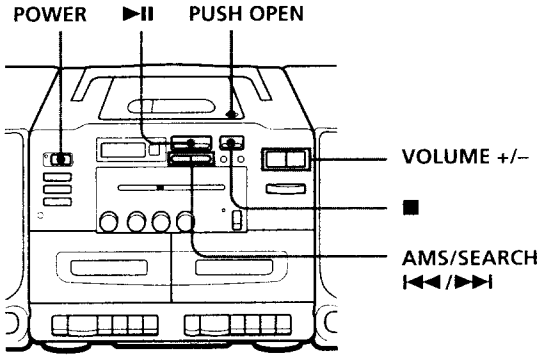
The player plays all the tracks once.

Display



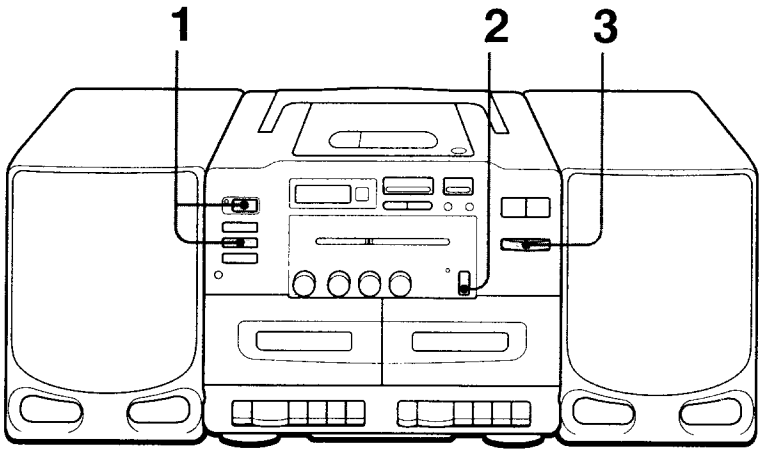
Track number **Playing time**

Use these buttons for additional operations



To	Press
Adjust the volume	VOLUME +/–
Stop playback	STOP ■
Pause playback	PLAY/PAUSE ▶II Press the button again to resume play after pause.
Go to the next track	AMS/SEARCH ▶▶I
Go back to the previous track	AMS/SEARCH I◀◀
Remove the CD	PUSH OPEN
Turn on/off the player	POWER

Listening to the radio

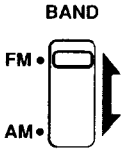


For hookup instructions, see pages 18 – 19.

1

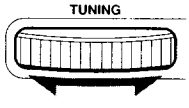
Press POWER and then press RADIO.

2



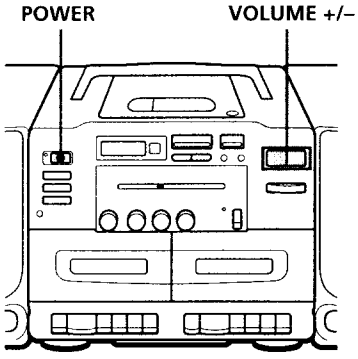
Set BAND to FM or AM to select the band you want.

3



Turn TUNING to tune in a radio station.
When the radio tunes to an FM stereo broadcast, FM STEREO indicator lights up. If the received FM stereo is too weak, the reception becomes monaural, and the FM STEREO indicator will go off.

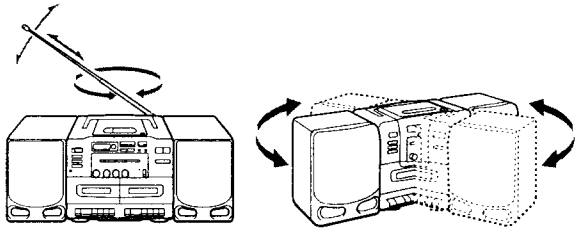
Use these buttons for additional operations



To	Press
Adjust the volume	VOLUME +/–
Turn on/off the radio	POWER

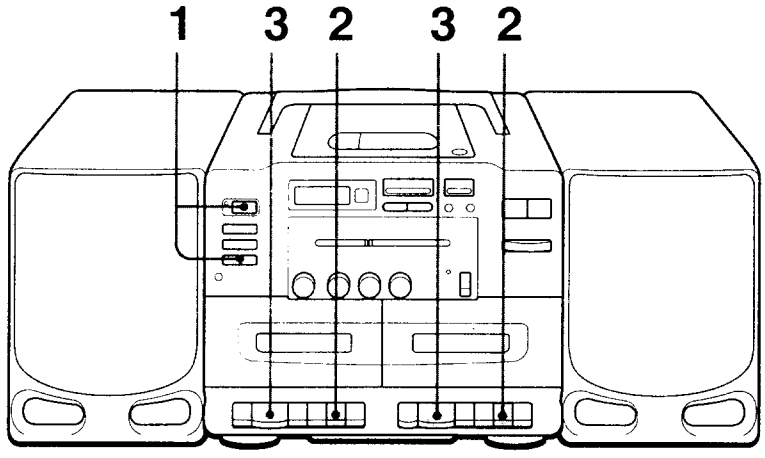
To improve broadcast reception

Reorient the antenna for FM. Reorient the player itself for AM.



for FM for AM

Playing a tape



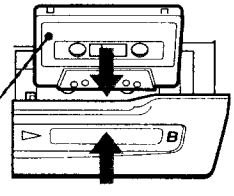
For hookup instructions, see pages 18 – 19.

1

Press POWER and then press TAPE.

2

Press ■⏏ to open the tape compartment and insert a recorded tape. Use TYPE I (normal) tape only. Close the compartment.



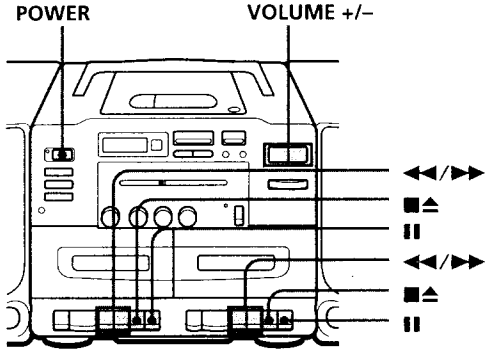
With the side you want to play facing forward

3

Press ►.

The player starts playing.

Use these buttons for additional operations

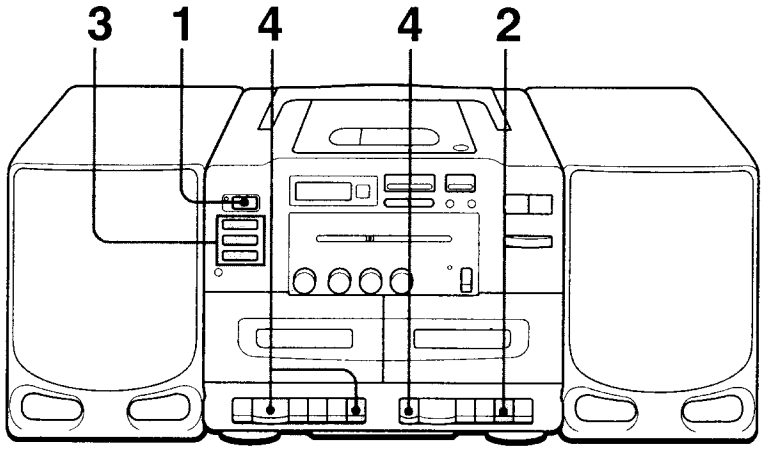


Note

During playback, do not press buttons on the other deck. Otherwise the playback speed may change.

To	Press
Adjust the volume	VOLUME +/–
Stop playback	■⏏
Fast-forward or rewind the tape	▶▶ or ◀◀
Pause playback	II Press the button again to resume play after pause.
Eject the cassette	■⏏
Turn on/off the player	POWER

Recording on a tape

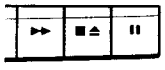


For hookup instructions, see pages 18 – 19.

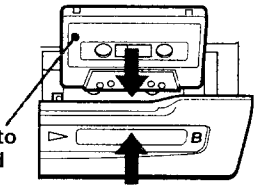
1

Press POWER.

2



Press ■⏏ to open the tape compartment on deck B and insert a blank tape. Use TYPE I (normal) tape only.

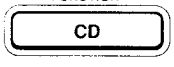


With the side you want to record on facing forward

3

Select the program source you want to record.

FUNCTION

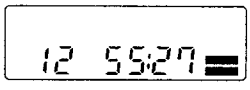


To record from the CD player, press CD and insert a CD (see page 4).

To record from the radio, press RADIO, select the band, and tune in the station you want (see page 6.)

To record from the tape, insert a recorded tape into deck A. Then press TAPE.

Display



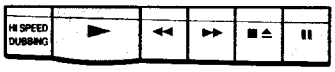
4

Start recording.

Deck B

To record from the CD player and the radio, press ● on deck B (► is depressed automatically).

Deck A



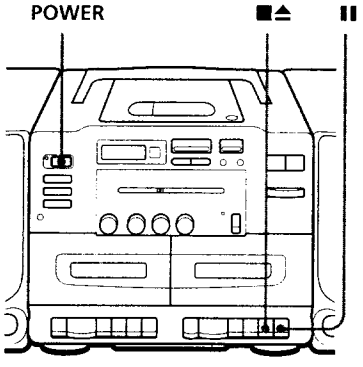
Deck B

To record from the tape, press ► and ❚❚ on deck A. (For high speed dubbing, press HI SPEED DUBBING instead.) Then press ● on deck B (► is depressed automatically).

Tips

- Adjusting the volume or the audio emphasis (see page 20) will not affect the recording level.
- For the best results, use the AC power as a power source for recording.
- If the AM makes a whistling sound after you've pressed ● in step 4, set the ISS (Interference Suppress Switch) at the rear to the position that most decreases the noise. Normally set the switch to "2".
- To erase a recording, proceed as follows:
  1 Insert the tape whose recording you want to erase into the tape compartment on deck B.
  2 Press POWER and then press TAPE.
  3 Press ● on deck B.

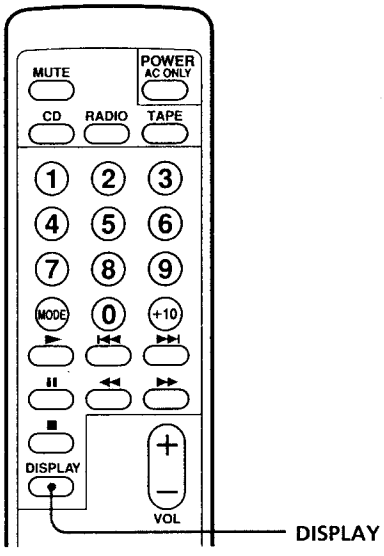
Use these buttons for additional operations



To	Press
Stop recording	■≜ on deck B
Pause recording	❚❚ on deck B Press the button again to resume recording.
Turn on/off the player	POWER

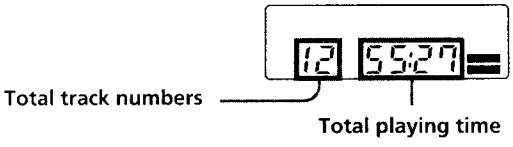
Using the display

You can check information about the CD using the display.



Checking the total track numbers and playing time

Press DISPLAY in stop mode.



Checking the remaining time

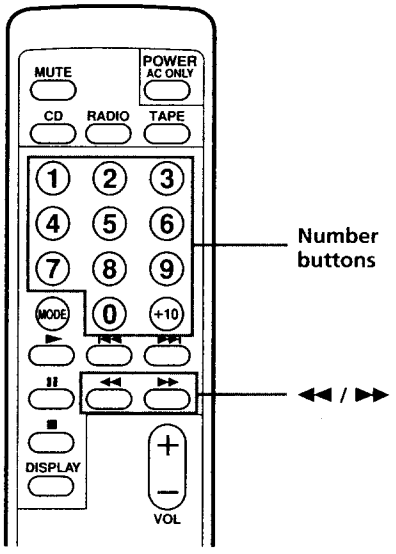
Press DISPLAY while playing a CD.

To display	Press DISPLAY
The current track number and the remaining time on the current track*	Once
Remaining time on the CD and the number of tracks left	Twice
The current track number and playing time	Three times

* For a track whose number is more than 20, the remaining time appears as "– –:– –".

Locating a specific track

You can quickly locate any track using the number buttons. You can also find a specific point in a track while playing a CD.



Note

You cannot locate a specific track if "INTRO", "SHUF", "REP" or "PGM" is lit in the display. Turn off the indication by pressing ■.

Tip

When you locate a track numbered over 10, press +10 first, then the corresponding number buttons.

Example:

To play track number 10, press +10 once, then press 0.

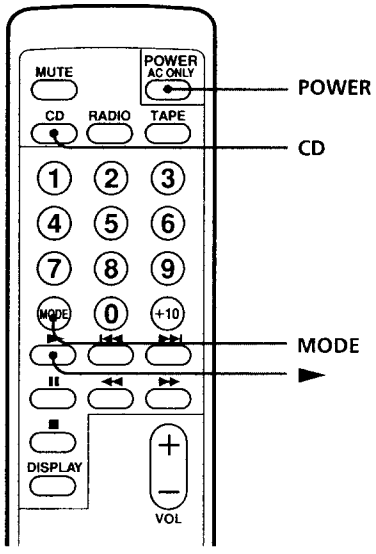
To play track number 23, press +10 twice, then press 3.

To locate	Press
a specific track directly	number buttons of the track.
a point while listening to the sound	▶▶ (forward) or ◀◀ (backward) while playing and hold down until you find the point.
a point while observing the display	▶▶ (forward) or ◀◀ (backward) in pause and hold down until you find the point. When you use the buttons on the player, use AMS/ SEARCH I◀◀ / ▶▶I.

Playing the beginning of each track

(Intro Scan Play)

You can play the first 10 seconds of each track on a CD.



1 Press POWER and then press CD.

2 Press MODE until "INTRO" appears in the display.

3 Press ►.

The first track plays for ten seconds. The player then skips to the next track to be played.

To start normal play

Press I◄◄. The player goes back to the beginning of the current track and starts playing the track and the succeeding tracks once.

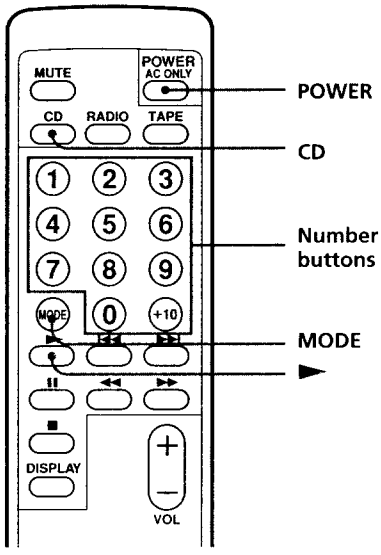
To cancel Intro Scan

Press MODE until "INTRO" disappears in the display.

Playing tracks repeatedly

(Repeat Play)

You can play tracks repeatedly in normal, shuffle or program play modes (see page 16).



Note

You cannot repeat playing track/tracks if "INTRO", "SHUF REP" or "PGM" is lit in the display. Turn off the indication by pressing ■.

1 Press POWER and then press CD.

2 Press MODE until the repeat mode you want appears in the display.

To repeat	Select
a single track	REP 1
all the tracks	REP ALL
tracks in random order	SHUF REP
programed tracks	PGM REP

3 Do either of the following to start repeat play:

- **When you've selected REP 1,** select the track by pressing the number buttons, then press ►.
- **When you've selected REP ALL and SHUF REP,** press ►.
- **When you've selected PGM REP,** program tracks (see step 3 on page 16), then press ►.

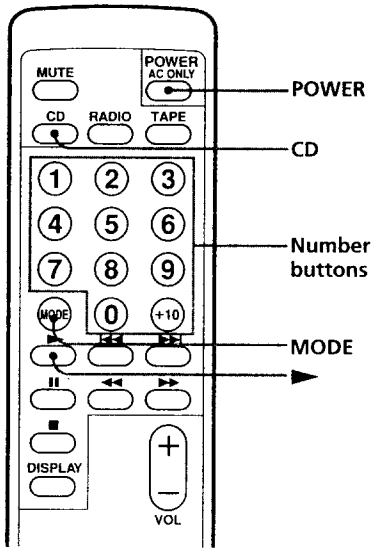
To cancel Repeat Play

Press MODE until "REP" disappears in the display.

Creating your own program

(Program Play)

You can make a program of up to 34 tracks in the order you want them to be played.



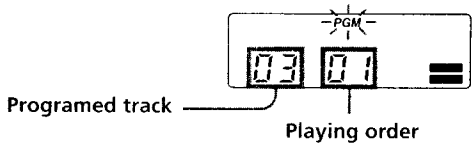
Tips

- You can select the track on the player. Press AMS/SEARCH ⏮ / ⏭ then press DISPLAY/ENTER instead of the number buttons.
- You can play the same program again, since the program is saved until you press ■ in stop mode, turn off the power, or open the CD compartment lid.
- You can record your own program. After you've created the program, insert a blank tape into deck B and press ● on deck B to start recording.

1 Press POWER and then press CD.

2 Press MODE until "PGM" appears in the display.

3 Press the number buttons for the tracks you want to program in the order you want. You can program up to 34 tracks.



4 Press ► to start program play.

To cancel Program Play

Press MODE until "PGM" disappears in the display.

To check the order of tracks before play

Press DISPLAY.

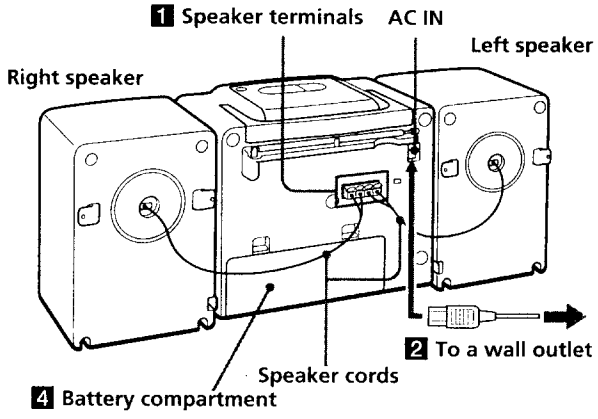
Every time you press the button, the track number appears in the programed order.

To change the current program

Press ■ once if the CD is stopped and twice if the CD is playing. The current program will be erased. Then create a new program following the programing procedure.

Hooking up the system

Make sure you turn off the power before making any connections.

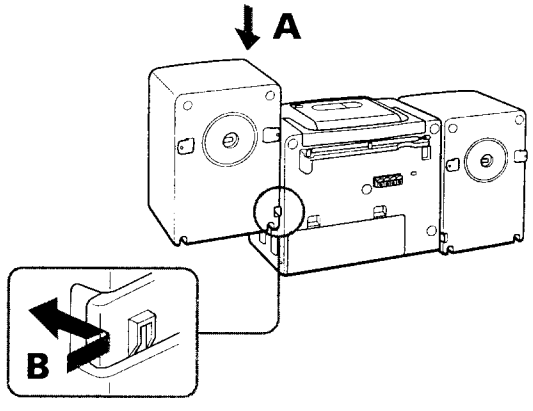


Tips

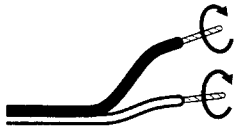
- To detach the speakers, unlock speaker (see B on the diagram) and slide the speaker box all the way up and away from the player.
- Connect the speakers for this unit only to the speaker terminals of this unit. If you connect any other speakers or equipment, malfunction may occur.

1 Hooking up the speakers

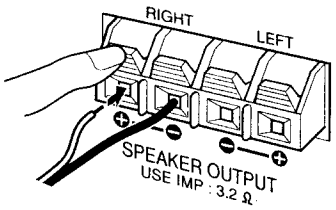
1 Align the grooves and slide the speaker box down until it snaps into place A.



2 Twist the speaker cable coating and strip it from the end of the cable.



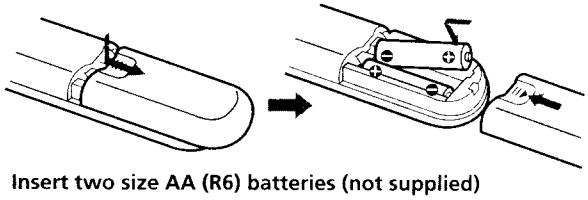
3 Connect the black wires to (–) minus and the red wires to (+) plus terminals; the right speaker wires to the RIGHT and the left speaker wires to the LEFT terminals of SPEAKER OUTPUT.



2 Connecting the AC power cord

Insert one end of the supplied AC power cord to the AC IN socket located at the rear of the player, and the other end to the wall outlet.

3 Inserting batteries into the remote



Insert two size AA (R6) batteries (not supplied)

Replacing batteries

With normal use, the batteries should last for about six months. When the remote no longer operates the player, replace all the batteries with new ones.

Notes

- When you operate the player with the batteries, you cannot turn on the player using the remote.
- Use the AC power source whenever you record since recording consumes much power.

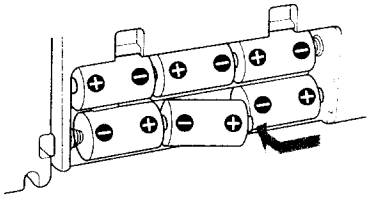
Tip

Replace the batteries when the OPR/BATT indicator dims or when the player stops operating. Replace all the batteries with new ones. Before you replace the batteries, be sure to take out the CD from the player.

4 Using the player on batteries

Insert six size D (R20) batteries (not supplied) into the battery compartment.

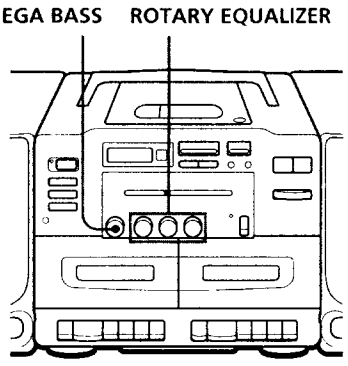
To use the player on batteries, disconnect the AC power cord from the player.



Adjusting the audio emphasis

(MEGA BASS/ROTARY EQUALIZER)

You can adjust the audio emphasis of the sound you are listening to.



Selecting the sound characteristic

Turn MEGA BASS/ROTARY EQUALIZER to select the audio emphasis you want.

Control	Turn the control clockwise (to MAX/+10)	Turn the control counterclockwise (to MIN/–10)
MEGA BASS	to increase heavy bass sounds	to decrease heavy bass sounds
LOW	to emphasize speaking voice, middle frequencies of instrumental music	to de-emphasize speaking voice, middle frequencies of instrumental music
MID	to provide more presence of vocals	to provide less presence of vocals
HIGH	to increase high treble sounds	to decrease high treble sounds or reduce high frequency noise/tape hiss

To mute the sound

Press MUTE on the remote commander to extinguish the sound instantly; press again to resume sound. During mute, the volume indication in the display window flashes.

Precautions

On safety

- As the laser beam used in the CD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the player, unplug the player, and have it checked by qualified personnel before operating it any further.

On power sources

- For AC operation use the supplied AC power cord; do not use any other type.
- The player is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the player itself has been turned off.
- Unplug the player from the wall outlet when it is not to be used for an extended period of time.
- For battery operation, use six size D (R20) batteries.
- When the batteries are not to be used, remove them to avoid damage that can be caused by battery leakage or corrosion.
- The nameplate indicating operating voltage, power consumption, etc. is located at the rear.

On placement

- Do not leave the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Do not place the player on an inclined or unstable place.
- Do not place anything within 10 mm of the side of the cabinet. The ventilation holes must be unobstructed for the player to operate properly and prolong the life of its components.
- If the player is left in a car parked in the sun, be sure to choose a location in the car where the player will not be subjected to the direct rays of the sun.
- Since a strong magnet is used for the speakers, keep personal credit cards using magnetic coding or spring-wound watches away from the player to prevent possible damage from the magnet.

On operation

- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the CD player section. Should this occur, the player will not operate properly. In this case, remove the CD and wait about an hour for the moisture to evaporate.
- If the player has not been used for a long time, set it in the playback mode to warm it up for a few minutes before inserting a cassette.

If you have any questions or problems concerning your player, please consult your nearest Sony dealer.

continued

Notes on CDs

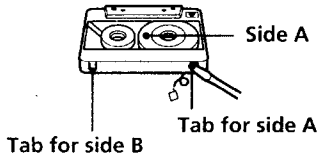
- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.

- Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in temperature inside the car.
- Do not stick paper or sticker on the CD, nor scratch the surface of the CD.
- After playing, store the CD in its case.

If there is a scratch, dirt or fingerprints on the CD, it may cause tracking error.

Notes on cassettes

- Break off the cassette tab from side A or B to prevent accidental recording. If you want to reuse the tape for recording, cover the broken tab with adhesive tape.



- To record on a tape with its tab broken off, cover the respective tab hole for side A or B with adhesive tape.
- The use of a cassette with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

Troubleshooting

	Symptom	Remedy
General	The power is not on.	• Connect the AC power cord to a wall outlet securely. • Make sure the batteries are inserted correctly. • You cannot turn on the player with the remote when you operate the player on batteries.
	There is no audio.	• Make sure the function button (CD, RADIO, or TAPE) you want to use is pressed. • Adjust the volume. • Unplug the headphones when listening through speakers.
CD Player	The CD does not play/ "no disc" lights in the display even when a CD is in place.	• Make sure that the CD compartment is closed. • Place the CD with the label surface up. • Clean the CD (see page 22). • Take out the CD and leave the CD compartment open for about an hour to dry moisture condensation. • Make sure CD is pressed.
	The sound drops out.	• Reduce the volume. • Clean the CD, or replace it if the CD is badly damaged • Place the player in a location free from vibration.
Radio	The audio is weak or has poor quality.	• Replace all the batteries with new ones if they are weak. • Move the player away from the TV. • If you are using the remote while listening to AM radio, noise may be heard. This is unavoidable.
	The picture of your TV becomes unstable.	• If you are listening to an FM program near the TV with an indoor antenna, move the player away from the TV.

continued

	Symptom	Remedy
Tape Player	The tape does not move when you press an operation button.	• Close the cassette compartment securely.
	The REC ● button does not function/The tape does not play.	• Make sure the safety tab on the cassette is in place. • Make sure TAPE is pressed.
	The tape does not erase completely.	• Clean the erasing head (see page 25). • Replace all the batteries with new ones if they are weak.
	The tape does not record.	• Make sure the tape is inserted properly. • Make sure the safety tab of the cassette is in place.
	The audio is weak/The audio quality is poor.	• Clean the heads, pinch rollers and capstans (see page 25). • Demagnetize the heads using a demagnetizer (see page 25).
	The sound is distorted.	• The TYPE II (high position) or TYPE IV (metal) tape is being used. Use TYPE I (normal) tape only.
Remote	The remote does not function.	• Replace all the batteries in the remote with new ones if they are weak. • Make sure that you are pointing the remote at the remote sensor on the player. • Remove any obstacles in the path of the remote and the player. • Make sure the remote sensor is not exposed to strong light such as direct sunlight or fluorescent lamp light. • Move closer to the player when using the remote.

After trying the above remedies, if the player still does not function properly, unplug the AC power cord and batteries. After all the indications in the display disappear, plug the power cord and insert the batteries again. If the problem persists, please consult your nearest Sony dealer.

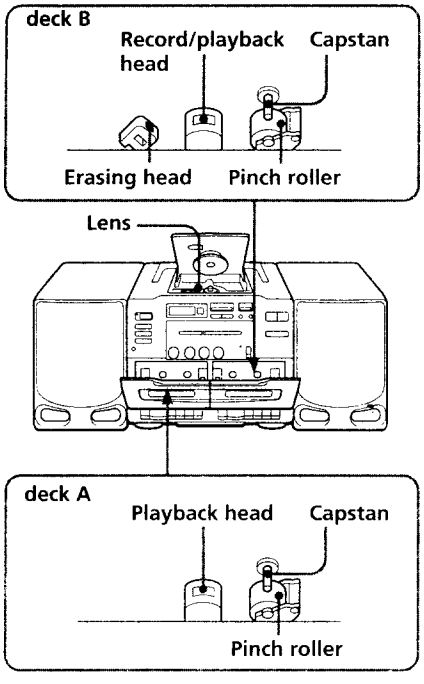
Maintenance

Cleaning the lens

If the lens becomes dirty, it may cause a skipping of sound during CD operation. Clean with a commercially available blower.

Cleaning the tape heads and tape path

Wipe the heads, the pinch rollers and the capstans with a cleaning swab slightly moistened with cleaning fluid or alcohol after every 10 hours of operation for optimum playback and recording quality. To make the best possible recording, however, we recommend that you clean all surfaces over which tape travels before each recording.



After cleaning, insert a tape when the areas cleaned are completely dry.

Demagnetizing the tape heads

After 20 to 30 hours of use, enough residual magnetism will have built up on the tape heads to begin to cause loss of high frequency sound and hiss. At this time, you should demagnetize the heads and all metal parts in the tape path with a commercially available tape head demagnetizer.

Cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzine.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 3.2-ohm loads, both channels driven from 80 - 15,000 Hz; rated 2 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

Other Specifications

CD player section

System
  Compact disc digital audio system
Laser diode properties
  Material: GaAlAs
  Wave length: 780 nm
  Emission duration: Continuous
  Laser output: Less than 44.6 µW
  (This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)
Spindle speed
  200 r/min (rpm) to 500 r/min (rpm) (CLV)
Number of channels
  2
Frequency response
  20 - 20,000 Hz +/-2 dB
Wow and flutter
  Below measurable limit

Radio section

Frequency range
  FM: 87.6 - 108 MHz
  AM: 530 - 1,710 kHz
Aerials
  FM: Telescopic aerial
  AM: Built-in ferrite bar aerial

Cassette-corder section

Recording system
  4-track 2-channel stereo
Fast winding time
  Approx. 120 s (sec.) with Sony cassette C-60
Frequency response
  TYPE I (normal): 80 - 10,000 Hz

General

Speaker
  Full range: 10 cm (4 in.) dia., 3.2 ohms, cone type (2)
  Tweeter: 3 cm (1 ⅛ in.) dia. (2)
Outputs
  Headphones jack (stereo minijack)
    For 16 - 68 ohms impedance headphones
  Speakers terminals
    For supplied 3.2 ohms impedance speakers
Power output (excluding US model)
  2.3 W + 2.3 W (at 3.2 ohm, 10 % harmonic distortion in DC operation)
Power requirements
  For CD radio cassette-corder:
  120 V AC, 60 Hz
  9 V DC, 6 size D (R20) batteries
  For remote commander:
  3 V DC, 2 size AA (R6) batteries
Power consumption
  AC 20 W
Battery life
  For CD radio cassette-corder:

FM recording
Sony R20P: approx. 13.5 h
Sony alkaline LR20: approx. 19 h
Tape playback
Sony R20P: approx. 7.5 h
Sony alkaline LR20: approx. 12 h
CD playback
Sony R20P: approx. 2.5 h
Sony alkaline LR20: approx. 4.5 h

Dimensions
  Approx. 637 × 247 × 206 mm (w/h/d) (25 ⅛ × 9 ¾ × 8 ⅛ inches) (incl. projecting parts)
Mass
  Approx. 6.2 kg (13 lb. 11 oz) (incl. batteries)
Supplied accessories
  AC power cord (1)
  Remote control (1)

Design and specifications are subject to change without notice.

Optional accessories

Sony MDR headphones series

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